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**26<sup>th</sup> Annual FAA Commercial Aviation Forecast Conference**

**Potential Air Cargo Growth in China**

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## Slide 2

 **Potential Cargo Growth in China**

- China's Future
  - China's Economic Goals
  - Latent Demand for Chinese products
  - China's Recent Capitalist Revolution
- China's Growing Share of World GDP and Trade
  - International Trade as a Proportion of GDP for China and Selected Other Countries
  - China's Position in World Trade
  - A Regional View of China
- Summary

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### China's Future

- There are 3 drivers of the future:
  - Momentum / History (fundamental/strategic analysis and time series / statistical forecasting tools)
  - Latent Demand
  - Goals and supporting program development (fundamental/strategic analysis)
- All point to the same future for China
  - Increasing share of world trade
  - Increase in GDP per capita
  - Secure future as a capitalist economy

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### China's Economic Goals

- 7% average annual GDP growth during 2001-2005, which will ultimately lead to per capita GDP at world-class standards
- Ensure that all citizens have a chance to share in the increase
- Keep arms length so as not to jeopardize HKG economy
- Actively seeking WTO entry
- Actively sought permanent MFN status with US
- The structural events surrounding China's economic revolution and goals point to lasting high growth for decades to come.

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 **Latent Demand for Chinese products:  
What China Offered**

- High levels of education
- A dedicated industrious workforce
- Low wages
- Vast natural resources
- Gradual opening to capitalism

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## China's Recent Capitalist Revolution

### – Experimentation / Start-up Phase

- Experimentation began in the late 1970s / early 1980s
- A few cities at a time
- A few industries at a time
- So that Chinese economists and planners could learn about *applied* capitalism
- So that Chinese planners could make mistakes on relatively small local economies and learn from their mistakes
- To prove to themselves whether to move forward with capitalism

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 **China's Recent Capitalist Revolution**

– Rollout Phase

- Early successes lead to a gradual measured rollout during the late 1980s and 1990s
- To other cities
- To other industries
- To more remote farming communities in order to share ultimate benefits with all citizens

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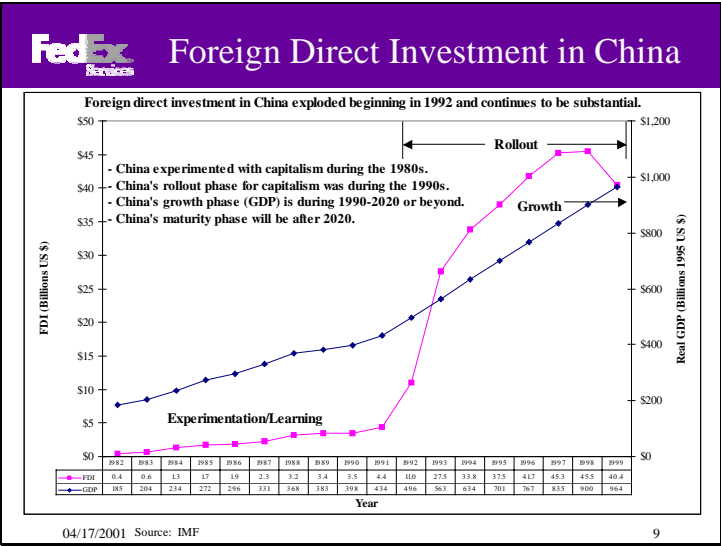
 **China's Recent Capitalist Revolution**

- Growth Phase
  - Rapid growth during 1990s to at least 2020
  - Latent demand for low cost, high quality Chinese goods
  - Multinational companies from Japan, the US, and Europe invest in plant and equipment
  - China and the WTO
  - China and MFN
  - China's trade surplus

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## China Trade by World Region - 1999

**China maintains a trade surplus in total and with every major world region except Asia.**

1999 China Trade by World Region (Billions US \$)				
Partner	Export	Import	Total	Exports Above (Below) Imports
Asia	97.9	108.5	206.5	(10.6)
North America	42.8	16.3	59.0	26.5
South America	5.6	2.5	8.0	3.1
Europe/Middle East	46.4	30.6	77.0	15.7
Other	2.4	7.9	10.3	(5.5)
<b>Total World</b>	<b>195.0</b>	<b>165.8</b>	<b>360.8</b>	<b>29.1</b>

Sources: IMF, FedEx Economics

Note - China's historical exports and imports are based on IMF data. Breakdown of trade by region is estimated using 1998 Direction of Trade Statistics by IMF.



## China's Trade vs Other Countries

**China has clearly become a major economic force in the world, exporting almost half as much as Japan and importing almost 2/3 as much as Japan.**

<b>1999 World Trade</b> (Billions US \$)			
	<b>Export</b>	<b>Import</b>	<b>Total</b>
<b>China</b>	195.0	165.8	360.8
<b>Japan</b>	404.0	279.2	683.2
<b>US</b>	701.2	1,038.7	1,739.9
<b>Asia</b>	1,344.0	1,147.0	2,491.0
<b>Europe/Middle East/Africa</b>	2,786.1	3,022.1	5,808.1
<b>Americas</b>	1,242.2	1,528.9	2,771.1
<b>Other</b>	462.8	137.2	600.0
<b>Total World</b>	5,835.1	5,835.1	11,670.1
<b>China as % of Japan</b>	<b>48%</b>	<b>59%</b>	<b>53%</b>
<b>China as % US</b>	28%	16%	21%

Sources: IMF, UNLink, FedEx Economics

Note - Regional aggregates are approximations.

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 **China's Recent Capitalist Revolution**

- Maturity Phase
  - 2020 or later
  - Signs of maturity would include:
    - Per capita GDP approaching that of US, Japan, Europe.
    - China making significant foreign investments, especially in lower-cost countries

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## China's Growing Total GDP

China's Growing Share of World GDP						
	Real GDP in Billions of 1995 US\$					
	1980	1985	1990	1995	2000	2005
China	164	272	398	701	1,041	1,472
Japan	3,303	3,884	4,934	5,290	5,618	6,233
Hong Kong	57	75	107	139	165	204
US	4,808	5,609	6,580	7,401	9,143	10,650
Asia	4,280	5,185	6,764	7,920	9,004	10,653
Europe/Middle East/Africa	7,016	7,635	8,966	9,988	11,415	13,306
Americas	6,346	7,247	8,427	9,544	11,639	13,621
World	17,642	20,067	24,157	27,452	32,057	37,580
China as % of World GDP	1%	1%	2%	3%	3%	4%
China as % of US GDP	3%	5%	6%	9%	11%	14%
China as % of Japan GDP	5%	7%	8%	13%	19%	24%

Sources: IMF, FedEx Economics

Note - Statistics are based on a large representative portion of these regions, but due to lack of available statistics, not all countries are included.




## China's Growing GDP Per-Capita

China's Growing Share of World GDP/Capita

	Real GDP/Capita in 1995 US\$					
	1980	1985	1990	1995	2000	2005
China	166	257	348	578	814	1,103
Japan	28,280	32,140	39,962	42,163	44,292	48,657
Hong Kong	11,236	13,689	18,813	22,618	24,304	28,948
US	21,122	23,524	26,334	28,138	33,304	37,254
Asia	2,970	3,339	4,041	4,451	4,782	5,403
Europe/Middle East/Africa	5,620	5,607	6,029	6,135	6,524	7,138
Americas	11,512	12,171	13,147	13,884	15,914	17,502
Average	5,444	5,717	6,354	6,704	7,346	8,144
China as % of Average GDP/Capita	3%	4%	5%	9%	11%	14%

Sources: GDP and Population history - IMF, Population forecast - WEFA, GDP Forecast - FedEx Economics

<div>  US's Top 10 Air Imports from China </div>	
<b>Top 10 US Air Imports from China for 1999</b> <b>(Based on Value)</b>	
<b>Commodity</b>	<b>Value (\$MM)</b>
1. Electronic Components, NEC	1,561
2. Semiconductors/Related Devices	594
3. Computer Peripheral Equipment	576
4. Computer Storage Devices	474
5. Womens/Misses Blouses/Shirts	466
6. Household Audio/Video Equipment	431
7. Girls/Childrens Outerware, NEC	366
8. Telephone/Telegraph Apparatus	304
9. Photographic Equipment/Supplies	274
10. Dolls and Stuffed Toys	222
Other	5,237
<b>Total</b>	<b>10,506</b>

Source: DOC

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<div>  US's Top 10 Air Exports to China </div>	
<b>Top 10 US Air Exports to China for 1999</b> <b>(Based on Value)</b>	
<b>Commodity</b>	<b>Value (\$MM)</b>
1. Semiconductors/Related Devices	731
2. Computer Peripheral Equipment	466
3. Electronic Computers	273
4. Telephone/Telegraph Apparatus	253
5. Aircraft Parts/Equipment, NEC	221
6. Radio/TV Communication Equipment	180
7. Instruments to Measure Electricity	149
8. Aircraft Engines/Engine Parts	111
9. Electronic Components, NEC	102
10. Analytical Instruments	82
Other	1,555
<b>Total</b>	<b>4,125</b>

Source: DOC



China's Top 10 Exports to the World

**China's Top 10 Exports**  
**(Based on 1997 Value)**

1. Toys, scale models, puzzles, etc
2. Trunks, suit-cases, camera cases, handbags, etc
3. Footwear with uppers of leather
4. Parts, accessories, except covers, for office machines
5. Radio, radio-telephony receivers
6. Automatic data processing machines (computers)
7. Footwear nes, with outer sole, upper rubber or plastic
8. Jerseys, pullovers, cardigans, etc, knit or crochet
9. Womens, girls suits, jacket, dress, skirt, etc, woven
10. Electric transformers,static converters and rectifiers

Source: 1997 UN trade data

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## China's Trade by Region

**China Trade by Region - 1997 (Billion \$)**

Region	Export	Import	Total
Guangdong / South	83.0	61.6	144.6
Shanghai / Central	65.1	49.9	115.1
Beijing / North	16.2	17.5	33.7
Dalian / Northeast	12.9	8.8	21.6
Sichuan / Southwest	3.4	2.7	6.1
Shaanxi / Northwest	2.1	1.8	3.9
<b>Total</b>	<b>182.7</b>	<b>142.4</b>	<b>325.1</b>

Source: China Statistical Yearbook 1998



## Summary

- China's successful capitalist revolution can be traced from the late 1970s / early 1980s from the experimentation and rollout phases to the current growth phase
- The growth phase is expected to last until 2020 and beyond
- Much of China's exports and imports are high-value or time-sensitive and therefore need air express and air cargo service

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## Summary

- Air express and air cargo represent 13% of China's exports to the US by value while accounting for only 1% of the pounds
- Both China's recent historical momentum and China's economic goals point to a high-growth future for China as a capitalist economy

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Summary

- At present growth rates, China's total GDP will reach half the size of Japan and ¼ the size of the US by 2020
- This would imply a 4-fold increase in trade for China by 2020, and more than that for the high-value time-sensitive segments that require air express and air cargo service

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